Abstract of the Disclosure

An economical manufacturing method and structure of electrodes for lithium based electrochemical devices, such as batteries and capacitors, which method results in the electrodes having various metal foil or grid current collectors embedded in the middle of their thickness by continuous dipping of said collectors in an electrode slurry, which is then solidified. The electrodes have superior performance and low resistance, due to short electron's travel to the collector, excellent adhesion of the electrode material to the grid, and uniform thickness at unlimited width. The method also includes additional steps and treatments to produce high quality electrodes.